Screening of Entomopathogenic Fungi for Biocontol of Diamondback Moth, Plutella xylostella

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Application of entomopathogenic fungi and pheromone presented an opportunity to attract male diamondback moths to an 'inoculation site', where the insects can be exposed to the pathogen that they autodisseminate subsequently into the surrounding environment, female moths and their progeny. In this study, we screened entomopathogenic fungi against diamondback moths for autodissemination system. Laboratory bioassay was performed with 5 genus 8 species 26 strains. Four isolates, *Beauveria bassiana* SFB-AC, *Paecilomyces fumosoroseus* SFP-198, *Verticillium lecanii* SFV-301 and *Metarhizium anisopliae* KCTC 40029 had pathogenicity to pupae of diamondback moth (mortality > 50 %). Especially *B. bassiana* SFB-AC and *P. fumosoroseus* SFP-198 had relatively low LC₅₀ against third instar larvae. Those two fungi reduced the hatching rate of eggs and affected male moth to decrease in population of diamondback moth larvae.